REMARKS/ARGUMENTS

The Applicants have carefully considered this Application in connection with the Examiner's Action and respectfully request reconsideration of this Application in view of the foregoing Amendment and the following remarks.

The Applicants originally submitted Claims 1-19 in the present Application. The Applicants have previously amended Claims 1, 6-8 and 13-14 and cancelled Claims 2, 7, 9, and 14 without prejudice or disclaimer. The Applicants amend Claims 1, 6, 8, 13, 15, and 20 in the present Amendment. Previously independent Claims 6 and 13 are amended to depend from Claims 1 and 8, respectively. Independent Claims 22 is new. Accordingly, Claims 1, 3-6, 8, 10-13 and 15-22 are currently pending in the Application. Support for the present amendments can be found, among other places, in paragraph [0036] of the present Application.

The Examiner indicates that Claim 20 would be allowable if rewritten in independent form. (*See* Examiner's Action, page 6.) The Applicants thank the Examiner. The Applicants therefore rewrite previously dependent Claim 20 into independent form. The Applicants therefore request that this claim be allowed to issue.

The Examiner has indicated that independent Claims 1 and 8 are rejected for analogous reasons. (*See* Examiner's Action, page 4.) As new independent Claim 22 incorporates language from independent Claims 8, and further include the language of allowable Claim 20, that of "wherein said minimal set of stations satisfies at least two constraints: a covering set constraint; and a covering assignment constraint," the Applicants state that independent Claim 22 should be deemed allowable for at least the reasons amended independent Claim 20 should be deemed allowable.

I. Rejection of Claims 1, 3-6, 8, 10-13, 15-19 and 21 under 35 U.S.C. §102

The Examiner has rejected Claims 1, 3-6, 8, 10-13, 15-19 and 21 under 35 U.S.C. §102(b) as being anticipated by "Optimizing Probe Selection for Fault Localization" by Brodie *et al.* ("Brodie").

Claim 1 is directed to a system for monitoring link delays and faults in an IP network. The system comprises a monitoring station identifier that computes a set of monitoring stations that covers links in at least a portion of the network. The system further comprises a probe message identifier, coupled to the monitoring station identifier, that computes a set of probe messages to be transmitted by at least ones of the set of monitoring stations such that the delays and faults in specific links spanning the set of monitoring stations can be determined, ***wherein the set of monitoring stations is selected as a minimal set.*** (Emphasis added.)

For support for this amendment, please see paragraph [0036]:

> ...In practice, it is preferable to have as few stations as possible since this reduces operational costs. Therefore, a two-phase approach is adapted to optimizing monitoring overheads. *In the first phase, an optimal set of monitoring stations is selected, while in the second, the optimal probe messages are computed for the selected stations. An "optimal station selection" S is one that satisfies the covering set requirement while simultaneously minimizing the number of stations.* After selecting the monitoring stations *S*, an "optimal probe message assignment" *A* is one that satisfies the covering assignment constraint and minimizes the sum m(s,v) ACs,v. Note that choosing csv=1 essentially results in an assignment A with the minimum number of probe messages while choosing csv to be the hop distance, hs,v yields a set of probe messages that traverses the fewest possible network links. (Emphasis added.)

Regarding Claim1, the Examiner states:

"With respect to Claim 1, Brodie discloses ... wherein said set of monitoring stations is a minimal set (4.2 Results, paragraph 3 – *'Although it is sufficient ... size of the probe set'* and figure 10)." (*See* Examiner's Action, page 2.)

Brodie, 4.2 Results, paragraph 3, states:

(iii) Number of Probe Stations:

Although it is sufficient to have just one probe stations, the interactions between probe paths increase if probe stations are added, and so the minimal probe set size decreases. Figure 10 shows the average true minimum set size for one, two, and three ***randomly placed*** probe stations. This confirms that adding probe stations reduces the network load imposed by probing. However, additional probe stations can be quite expensive, and the process may soon reach a point of diminishing returns where the cost of an additional probe station exceeds the benefit gained by reducing the size of the probe set. (Emphasis added.)

According to Brodie:

We begin by selecting from the n nodes a subset of k nodes as the probe station. ***In this work, we do not address the question of how to select the probe stations, since they usually cannot be chosen to optimize the probing strategy***; other considerations, such as gaining access to the machines, may be more important for choosing probe stations. (*See* Brodie, 3.1 Determining the Initial Probe Set; emphasis added)

The Examiner states, regarding arguments made in the previous Amendment:

"Applicant argues that Brodie varies the number and the placement of probe stations, and therefore teaches away from the claimed minimal set of monitoring stations. However, in teaching a variable number of probe stations, Brodie in fact discloses every possible number of probe stations, including the minimal set." (*See* Examiner's Action, page 6.)

Although the Applicants respectfully disagree with the above argument, for the purpose of advancing prosecution, the Applicants amend Claim 1 to recite "wherein said set of monitoring stations is *selected as* a minimal set." The Applicants respectfully state that Brodie purportedly

teaching a variable number of probe stations, as proposed by the Examiner, does not disclose or suggest wherein said set of monitoring stations is *selected as* a minimal set.

Therefore, Brodie does not disclose each and every element of the claimed invention and as such, is not an anticipating reference. For similar reasons, Brodie does not disclose each and every element of independent Claim 8 and Claim 15. Because Claims 3-5, 10-12 and 16-19 are dependent upon Claims 1, 8, and 15, respectively, Brodie also cannot be an anticipating reference for Claims 3-5, 10-12 and 16-19. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these claims.

II. Conclusion

In view of the foregoing Amendment and remarks, the Applicants now see all of the Claims currently pending in this Application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1, 3-6, 8, 10-13, and 15-22.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present Application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395

Respectfully submitted,

HITT GAINES, P.C.

J. Joel Justiss
Registration No. 48,981

Dated: 10/29/07

P.O. Box 832570
Richardson, Texas 75083
(972) 480-8800